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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,736	11/26/2003	Yong Hee Kim	K-0571	3955
34610	7590	08/14/2006		
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153				
			EXAMINER PATEL, RITA RAMESH	
			ART UNIT 1746	PAPER NUMBER

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/721,736

Applicant(s)

KIM, YONG HEE

Examiner

Rita R. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

Acknowledgement has been made of applicant's claim for priority under 35 U.S.C. 119; this application claims the benefit of Korean Application No. 10-2002-0074989 filed on November 29, 2002.

### ***Priority***

Acknowledgement has been made of applicant's claim for priority under 35 U.S.C. 119; this application claims priority to a document of the Republic of Korea P2002-0074989 (11/28/2002).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 6 is based on a disclosure which is not enabling; specifically, the mechanism by which the size of the injection holes vary with respect to the water pressure is critical or

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essential to the practice of the invention, but is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how the injection holes perforating the nozzle body would each have a size determined by the water pressure of the water circulating means. Claim 6 appears to be incomplete in providing limitations for pointing out and clearly claiming applicant's invention. For example, is the size of the injection holes determined prior to assembly by determining the exact water pressure in the hose for attachment to the dishwasher? Do the injection holes automatically or manually vary in size during operation, with dependence on the water pressure? If so, how does this work? Is it required that the user must insert a nozzle body with smaller sized holes for low pressures and larger sized holes for greater water pressures? Please provide clarification.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Elick et al. herein referred to as "Elick" (Pub. No.: US 2004/0003830).

Elick teaches a dishwasher with a pump and filtration system. The filter system includes an annual strainer 36 and filter guard 39. Pump assembly 30, drain pump 79, drain hose 85, and nozzles 273 read on applicant's claim for a pressurized water circulating means and cleaning nozzles. The plurality of nozzles 273 provide many spray streams thereon the filtration system to provide cleaning. In a manner commensurate with outer wall 279, filter guard 39 has an underside 292 which curves in order to enhance the directing of wash arm spray for the back-washing of fine mesh screen 207. That is, as previously indicated, lower wash arm 47 includes at least one set of nozzles 273 for use in directing a spray to backwash and cleanse fine mesh screen 207. Filter guard 39 is spaced sufficiently from pump housing cap 235 and nozzles 273 are suitably angled to accommodate this spray upon this fine mesh screen 207. However, the curvature of underside 292 further enhances said backwashing function. Wash-out regions 280 are provided for flushing out trapped food particles in

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connection with the overall filter guard 39 (col. 10, lines 41-53). Also, Elick teaches a sump in operation with the apparatus (col. 9, line 63).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elick as applied to claims 1 and 5 above.

Nozzles 273 are juxtaposed to the filtering system 36, 39 of Elick. Although, Elick fails to teach a plurality of concentrically arranged filters, it would have been obvious to one of ordinary skill in the art at the time of the invention to have multiple concentric filters therein Elick. Elick's multiplicity of filters 36, 39 teaches that having multiple filters within a dishwasher aids in filtering out food particles, etc. that may clog the system. Multiple filters would achieve better filtering of different sized particles of objects to be filtered within Elick's filtration system. It is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 124 USPQ 378 (CCPA 1960).

Moreover, in providing multiple filters concentrically formed to make-up a filtering system, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the size filter holes therein such that the outer filter has the

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smallest holes and the innermost has the largest holes, comparatively. Thus, particles of food being filtered therein would be filtered in accordance to size, to eliminate clogging the system and achieve adequate efficient filtering for small particles.

Moreover, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the size of the filtering holes to achieve consistent water flow through the filtering system. Water flow/water pressure is known to be important in such a filtering process because in dishwashing apparatuses, pumps and sumps are used to maintain filtering and pressure flow through the system so desirable filtering is maintained, as well as, water efficiency, and optimal water flow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize such filtering holes, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elick as applied to claims 1 and 5 above, and further in view of Alabaster (US Patent No. 3,122,148).

Alabaster discloses a dishwasher with multiple filter means. Also, Alabaster teaches arranging the construction of a filtration system that while the full flow of liquid passes through a relatively coarse meshed strainer, the following proportion of the flow is by-passed through a fine mesh secondary filter. It is preferred to remove the coarser particles of soil from the partial, or by-pass, liquid stream before it enters the fine mesh

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strainer. This reads on applicant's claim for providing a filter assembly with multiple filters. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine such features of concentrically aligning such Alabaster filters, as shown in Figures 2 and 3, to the invention of Elick, one would achieve better filtering means by removing coarse materials by a first filter and small materials by latter filters, as found to be a common issue to be overcome in the art of filtration systems for dishwashing apparatus taught by Alabaster.

In addition, Alabaster teaches that if the mesh of the strainer is too coarse, particles that are likely to form redeposit will be left in circulation; if the mesh is sufficiently fine to remove all deleterious particles, the filter may be quickly choked and as the differential pressure rises as a result of this choking, the rate of flow will diminish with loss of washing action. Furthermore, particles may be sucked through and returned to circulation; thus reading on applicant's limitations wherein the assembly has varying sized filter holes, respectively where the outer filter of the assembly has the smallest holes among the varying sized holes (col. 1, lines 23-40). Although it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Elick, as described above, to teach varying sized filtering holes, in arguendo, it would have been similarly obvious to one of ordinary skill in the art at the time of the invention to combine such features of Alabaster to Elick to achieve efficient filtering means, diminish loss of washing action, reduce particles sucked through the filter and returned to circulation, and minimized choking in such a dishwashing machine.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RRP

ALEXANDER MARKOFF  
PRIMARY EXAMINER

